Abstract

<u>Artificial Intelligence Device and Corresponding Methods for Selecting Machinability Data</u>

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The present invention describes a device incorporating artificial intelligence and corresponding methods for recommending an optimal machinability data selection. The device comprises of a first component, which feeds the system with necessary inputs. A second component, which is the main processing unit, acts as an inference

10   engine to predict the outputs. The last component interprets the outputs, conveys the processed outputs to target location and converts them into necessary tasks. The inputs are identified as the machining operations, work piece material, machining tool type, and depth of cut. The outputs are the machining parameters, comprising of the optimal cutting speed and feed rate. The inference engine can be established with

15   fuzzy logic, neural network or fuzzy-neural network.